| Date             | 26 September 2022                                       |
|------------------|---|
| Team ID          | PNT2022TMID41466  |
| Project<br>Name  | A Novel Method For Handwritten Digit Recognition System |
| Maximum<br>marks | 2 Marks   |

## PROBLEM STATEMENT

To identify the letters of the sentence written by the user in their devices and to convert the handwritten text into digital format.

|                                  | The generative models can perform      |
|----------------------------------|--|
| What does this problem focus on? | recognition driven segmentation. The   |
| •                                | method involves a relatively small     |
|                                  | number of parameter and hence          |
|                                  | training is relatively easy and fast.  |
| When does this occur?            | This matter occurs when written by     |
|                                  | hand digits are not necessarily always |
|                                  | of typically the same size, thickness, |
|                                  | orientation and validated to margins   |
|                                  | since they differ coming from writing  |
|                                  | of personal to individual.             |
| Why do we need this?             | Automating these tasks removes the     |
|                                  | need for human effort which is error   |
|                                  | prone in performing these kind of      |
|                                  | tedious works and improves speed as    |
|                                  | well as efficiency.                    |
| How to do this?                  | Unlike many other recognition          |
|                                  | schemes, it does not rely on some      |
|                                  | form of pre-normalization of input     |
|                                  | images, but can handle arbitrary       |
|                                  | scalings, translations and a limited   |
|                                  | degree of image rotation.              |
| Where it is used?                | The digit recognization system is      |
|                                  | used in postal mail sorting, bank      |
|                                  | check processing, form data entry.     |
|                                  |  |